

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCUNITED STATES DEPARTMENT OF COMMERCUNITED STATES OF PATENTS

PO Box 1450 Alexandra, Vinjinia 22313-1450 www.uspto.gov

APPLICATION NO.	APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/908,731 07/20/2001		07/20/2001	Yasushi Kaneko	010912	8701
23850	7590	07/14/2003			
ARMSTRO 1725 K STR	ONG,WE	STERMAN &	EXAMINER		
SUITE 1000 WASHING		20006		TON, MINH	TOAN T
				ART UNIT	PAPER NUMBER
				2871	
				DATE MAILED: 07/14/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary - The MAILING DATE of this communication as riod for Reply A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 3 r CFR + 1 after SIX (8) MONTHS from the mailing date of this communication. If the period for reply specified above, the maximum statutory period for reply well, with specified above, the maximum statutory period for reply and period for reply well with specified above, the maximum statutory period and the state of the stat	LY IS SET TO EXPIRE 3 M 136(a). In no event, however, may a n sly within the statutory minimum of thirts will apply and will expire 51X (b) MoN; will apply and will expire 51X (b) MoN; or date of this communication, even if the April 2003.	ONTH(S) FROM eptly be timely filed y (30) days will be considered timely.
The MAILING DATE of this communication apriod for Reply A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1. Extensions of time may be available under the provisions of 37 CFR 1. If the 30 Key MONTHS from the mailing also of this communication. If the 30 Key MONTHS from the mailing also of this communication. If the 30 Key MONTHS from the mailing also of the statutory period Fallure to reply within the set or extended period for my statutory period Any reply recorded by the Office later than three months after the mails are provided to the statutory of the st	Toan Ton Pears on the cover sheet w. Y IS SET TO EXPIRE 3 M 136(a). In no event, however, may a n dy within the statutory minimum of think 188 apply and will expire SIX (b) MON and the statutory minimum of think 189 apply and will expire SIX (b) MON Age of the communication, even if it	Art Unit 2871 ith the correspondence address ONTH(S) FROM epty be limely filed (/30) days will be considered timely.
A SHORTENED STATUTORY PERIOD FOR REPI THE MALINIA DATE OF THIS COMMUNICATION. Extensions of time they be available under the provisions of 3 r CFR 1 ander SN: (8) MONTHS barned and the provisions of 3 r CFR 1 ander SN: (8) MONTHS barned and the provision of 3 r CFR 1 and EN SN: (8) MONTHS barned and the state of this communication. If the period for reply spondled above is the assume state of the state of	Pears on the cover sheet w. Y IS SET TO EXPIRE 3 M 196(a). In no event, honever, may a n aly within the statutory minimum of thirt will apply and will expire SIX (b) MON or cause the spacefaction to become Ago of date of this communication, even if it April 2003.	2871 If the correspondence address ONTH(S) FROM ptly be limely filed (X0) days will be considered timely.
A SHORTENED STATUTORY PERIOD FOR REPI THE MALINIA DATE OF THIS COMMUNICATION. Extensions of time they be available under the provisions of 3 r CFR 1 ander SN: (8) MONTHS barned and the provisions of 3 r CFR 1 ander SN: (8) MONTHS barned and the provision of 3 r CFR 1 and EN SN: (8) MONTHS barned and the state of this communication. If the period for reply spondled above is the assume state of the state of	Pears on the cover sheet w. Y IS SET TO EXPIRE 3 M 196(a). In no event, honever, may a n aly within the statutory minimum of thirt will apply and will expire SIX (b) MON or cause the spacefaction to become Ago of date of this communication, even if it April 2003.	ONTH(S) FROM eptly be timely filed y (30) days will be considered timely.
A SHORTENED STATUTORY PERIOD FOR REPI THE MALINIA DATE OF THIS COMMUNICATION. Extensions of time they be available under the provisions of 3 r CFR 1 ander SN: (8) MONTHS barned and the provisions of 3 r CFR 1 ander SN: (8) MONTHS barned and the provision of 3 r CFR 1 and EN SN: (8) MONTHS barned and the state of this communication. If the period for reply spondled above is the assume state of the state of	LY IS SET TO EXPIRE 3 M 136(a). In no event, however, may a n sly within the statutory minimum of thirts will apply and will expire 51X (b) MoN; will apply and will expire 51X (b) MoN; or date of this communication, even if the April 2003.	ONTH(S) FROM eptly be timely filed y (30) days will be considered timely.
2b) X	nis action is non-final.	
Since this application is in condition for allowed closed in accordance with the practice under position of Claims		ers, prosecution as to the merits is . 11, 453 O.G. 213.
4) Claim(s) 1-20 is/are pending in the application	ı	
4a) Of the above claim(s) is/are withdray	vn from consideration	
o) Claim(s) is/are allowed.	Without consideration.	
B)⊠ Claim(s) <u>1-20</u> is/are rejected.		
7)☐ Claim(s) is/are objected to.		
B) Claim(s) are subject to restriction and/or	election re-	
) The specification is objected to by the Examiner.		
)L The drawing(s) filed on is/are: a)□ accent	ed or h) abjected to be the	Evaminas
The section to the	drawing(a) b - b + c + .	
i i i i i i i i i i i i i i i i i i i	is: a) approved b) [] dia-	BDDroved by the Event
		pproved by the Examiner.
I he oath or declaration is objected to by the Exar	miner.	
ty under 35 U.S.C. §§ 119 and 120		
Acknowledgment is made of a claim for foreign p	Priority under 35 U.S.C. e. 4	10(a) (d) (0
None of:		10(a)-(u) Or (t).
 Certified copies of the priority documents to 	lave heen received	
2. Certified copies of the priority documents h	lave been received in Appli	ontine M
		cation No
see the attached detailed Office action for a list of	the certified and	
a reachemengine it is made of a claim for domestic n	riority under 25 U.C.O. c. 4	
a) The translation of the foreign language provis Acknowledgment is made of a claim for demonstrate	ional application has been	(e) (to a provisional application).
Acknowledgment is made of a claim for domestic p ent(s)	riority under 35 U.S.C. 88	eceived. I20 and/or 121
		25 Gradi 121,
office of References Cited (PTO-892) etice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summ	nary (PTO-413) Paper No(s)
ormation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	ral Patent Application (PTO-152)

Part of Paper No. 13

Application/Control Number: 09/908,731

Art Unit: 2871

Remarks [product-by-process]

 The following claimed phrases have not been given patentable weight because they have been held that even though product-by-process claims are limited by and defined by process, determination of patentability is based on the product itself. See In re Thorpe, 777 F.2d 695, 697, 227 USPO 964, 966 (Federal Cir. 1985): "by anodic oxidation"

Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

 Claims 1-10, 14, 16, 18-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Motomura et al (US 6456347).

Motomura discloses (see at least Figure 3) a transflective LCD device comprising: a liquid crystal layer sandwiched between upper and lower substrates (21, 22); a semi-transmissive film 26 (Applicant's transflective layer) disposed on an inside of the lower substrate, wherein the semi-transmissive film has both a light reflective property and a light transmissive property; a upper polarizer 13 disposed on an outside of the upper substrate 21; a lower polarizer 15 and a backlight disposed on an outside of the lower substrate 22; an upper compensator 12 disposed

Page 3

Application/Control Number: 09/908,731

Art Unit: 2871

between the upper polarizer and upper substrate; a lower compensator 14 disposed between the lower polarizer and the lower substrate; color filters 27 formed one of the upper and lower substrates.

Motomura discloses the use of STN (super-twisted nematic) liquid crystal (col. 10, lines 3-5)

Motomura discloses the semi-transmissive film having a mirror-like surface or a light scattering surface (col. 4, lines 12-14).

Motomura discloses a light scattering layer 35 disposed on an outside of the upper substrate.

Motomura discloses the first/second compensator formed of a plurality of compensating films (see claims 27-29)

Motomura discloses an overcoat (Applicant's protective film) layer 29 disposed between the semi-transmissive film and an electrode layer 30.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
 obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 11-13, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 Motomura as applied to claims 1-10, 14,16, 18-20 above.

Application/Control Number: 09/908,731

Art Unit: 2871

Motomura discloses the semi-transmissive film comprising materials such as TiO₂.

Materials such as AlO₂ would consider as functional-equivalent to materials such as TiO₂.

Therefore, it would have been obvious to one of ordinary skill in the art to employ materials such as AlO₂ because its functional-equivalence to TiO₂.

Per claims 15 and 17, the optimum range would have been at least obvious to one of ordinary skill in the art so as achieving desirable image effect.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (703) 305-3489. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

July 3, 2003

TOANTON
PRIMARY EXAMINER